Confidential Claim Retracted

AUTHORIZED BY: 5

DATE: 5/16/13

AIR QUALITY MONITORING PROGRAM

One 168-hour sample is taken each month at each of the four locations specified by Marc Nelson. They are collected about three meters above the ground on GF/A Glass Microfibre filter paper, using an RAC Heavy-duty Sampler.

AMBIENT RADON STUDY

Radon-222 is monitored continuously at each of the air sampling locations specified by Marc Nelson. The samples are monitored by the use of the Model RGM-2 Radon Gas Monitor. Normal data output is printed hourly and a 24-hour average is printed at the end of a 24-hour period.

JACKPILE - WATER RADIOLOGICAL ANALYSIS (THIRD QUARTER, 1983)

	Rad	ium-226 pC	i/L	Uraniu	m-Natural	ppm
DESCRIPTIVE LOCATION	Jul.	Aug.	Sep.	Jul.	Aug	Sep.
Rio Paguate Upstream	0.23	0.29	0.30	0.0031	0.0030	0.0010
Rio Moquino Upstream	<0.20	<0.20	0.33	0.0030	0.0038	0.0092
Rio Paguate Above the Confluence	1.04	1.20	2.75	0.155	0.150	0.292
Rio Moquino Above the Confluence	0.40	0.61	0.71	0.048	0.048	0.023
Rio Paguate Ford Crossing	0.52	4.61	1.23	0.232	0.401	0.211
Paguate Reservoir	0.38	3.21	3.77	0.022	0.024	0.154
Jackpile Well #4	0.32	*	*	0.0021	*	*
Jackpile New Shop	1.64	*	*	0.0021	*	*
Jackpile Old Shop	*	*	*	*	*	*
Mouth of Oak Canyon Wash	**	**	**	**	**	**

^{*} Discontinued ,nc sample

^{**}No sample because the Mouth of Cak Canyon Wash was dry.

FOR	THE	монтн	OF: July	83

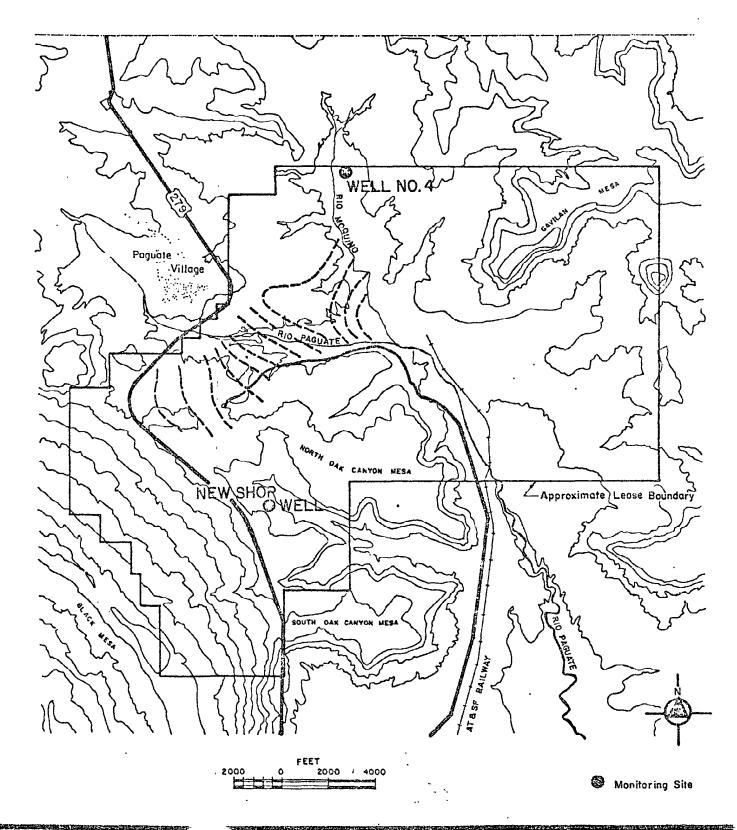
							NEW N	MEXICO	OPERAT	IONs .				FOR T		TH OF:Jul	ly 83	
DESCRIPTION	DATE	pН	TDS ppm	Cond umhos	HCO _{ppm} 3	C1 ppm	SO ₄ ppm	Na Ppm	, ppm K,	. Ca ++	Mg ++ ppm	NO ₃	ppm	S10 ₂ ppm	Mn ppm			
Rio Paguate Upstream	7/1/83	7.69	819	950	305	14	288	48	6.1	107	49	1.2	0.41.	33.1	0.015			
Nio Moquino Unstream	7/1/83	8.06	1796	1800	251	18:5`.	1045	195	.8.9	149	126	1.4	0.64	9.6	<0.005			
Tio Paguate Above the Confluence	7/1/83	7.80	1756	1950	403	20	884	135	10	162	140	1.1	0.72	20.2	0.081			
Rio Moquino Above the Confluence	7/1/83	8.03	2222	2200	268	21	1328	247	8.8	180	167	1.1	0.85	15.1	0.016			
Rio Paguate Fol Crossing	7/1/83	7.14	2229	2100	298	24.5	1.300	248	9.1	177	170	1.4	0.84	15.9	Q.007			
Paquate Reservoir	7/1/83	7.30	1392	1450	227	17.0	.769	164	8.5	101	103	1.2	0.58	1.0	0.13			
Jackbile #4	7/1/83	8.33	791	830	378	11.0	174 .	. 222	0.7	2.4	0.4	1.4	1.0	10.1	0.01			
Inchnile New Shop	7/1/83	7.98	1584	1720	390	33.0	672	470	2.6	12 .	1.7	1.6	1.2	13.8	0.025			
Jackpile Old Shop			DISCONT	NUED, NO	SAMPLE													
	DATE	As	Ba ppm	Cd ppm	Cr	Pb	Hg	Se ppm	Cu	Fe	Zn ppm	Mo	N1 ppm	рьш. А				
Rio Paguate Upstream	7/1/83	K 0.005		40.001	٠٥.005	40.01	<0.0005	<0.005	0.007	0.008	0.003	<0.01	<0.005	∠0.05	•		j	
Rio Moquino	7/1/83	40.005	₹0.05	0.001	40.005	<0.01	(0.0005	K0.005	0.002	<0.005	0.001	¢0.01	40.005	<0.05				
Rio Paguate Above	7/1/83	<0.005	(0.05	₹0.001	₹0.005	۷0.01	₹0.0005	< 0:005	0.002	0.018	0.001	<0.01	< 0.005	₹0.05				
Rio Moquino Above the Confluence	7/1/83	<0.005	٥.05	0.001	0.005	40.01	0.0005	<0.005	0.001	0.005	0.001	(0.01	0.005	0.05				
Rio Paguate Ford Crossing	7/1/83	40.005	<0.05	0.001	40.005	۷.01	0.0005	(0.005	0.001	0.040	0.001	0.01	٥.005	40.05				
Paguate Reservoir	7/1/83	∠0.005	0.05	0.001	40.005	<0.01	(0.0005"	.0.005	0.002	0.082	0.001	(0.01	<0.005	0.05			,	
Jackpile #4	7/1/83	~0.005	0.05	0.001	0.005	(0.01''	₹0.0005	0.005	0.002	0.041	0.035	۷.01	0.005 ر	0.05				_
Machaile New Shop	7/1/83	40.005	1	1	0.005	1	40.0005	0.005	0.003	0.021	0.003	0.01	-c.005	0.05				
CONFIDEN	ITIAL			NISCONTIN	HED NO	CVWDIE							POL-	EPA0	1-0004	4701 ^{~~}	hammer - 1942, 1	

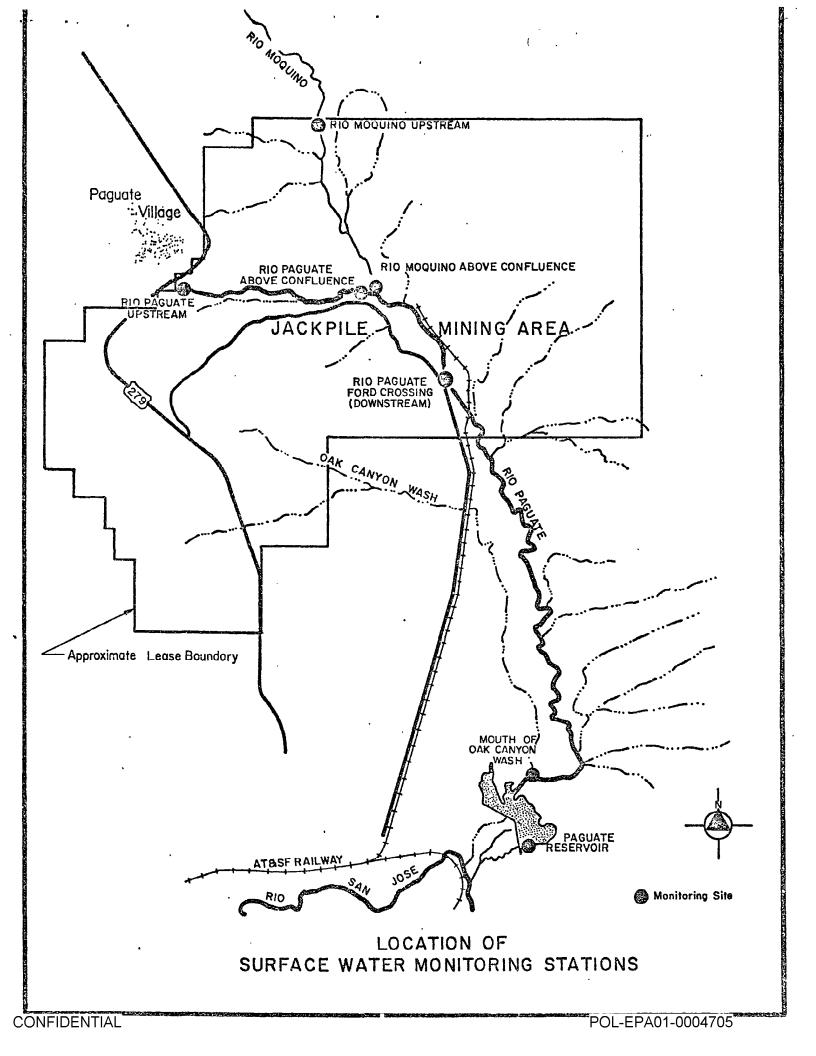
FOF	THE	MONTH	OF:	Aug	8
rur.	1111	IVI CIN I I I	\circ .		

								VILKIOO	OI CHAI	10111			•				
DESCRIPTION	DATE	pН	TDS ppm	Cond umhos	HCO _{ppm} 3	C1 ppm	SO ₄ ppm	Na ⁺ ppm	K ⁺	Ca ⁺⁺ ppm	Mg ⁺⁺ ppm	NO ₃	ppm	SiO ₂	Mn ppm		
Rio Paguate Opstream	8/1/83	7.55	815	950	278	17.5	313	43.9	6.3	105	48.7	1.5	0.41.	30.8	0.005		, ,,
Rio Hoquino Unstream	8/1/83	7.76	1953	2510	234	26,1 `.	1169	227	10.3	139	145	1.5	0.68	19.3	<0.005		i
lio Paguate Above the Confluence	8/1/83	7.86	1562	3320	361	24.9	774	131	9.7	126	133	1.3	0.78	20.1	0.011		·
Rio Moquino Above the Confluence	8/1/83	7.82	2606	3100	295	28.1	1588	300	10.2	187	195	1.1	0.95	16.7	40.005		
Rio inguate	8/1/83	7.75	2587	3000	317	30.3	1546	289	10.9	193	198	1.3	0.90	16.3	0.03	<u> </u>	
Paguate Reservoir	8/1/83	7.06	1662	1980	437	35.2	751	188	20.8	108	118	1.4	0.72	6.8	1.6		
Jackpile #4			DISCONT	NUED, NO	SAMPLE		<u>.</u>										
Jackpile New Shop			DISCONT	NUED, NO	SAMPLE												
Jackpile Old Shop			DISCONT	INUED, NO	SAMPLE												
	DATE	As ppm	Ba ppm	Cd ppm	Cr ppm	P b	Hg	Se ppm	Cu ppm	Fe ppm	Zn ppm	Mo ppm	N1 ppm	ppm.			<u>.</u> :
Rio Paguate Upstream	8/1/83	0.005	0.05	0.001	0.005	<0.01	40.0005	0.005	0.006	0.016	0.009	k0.01	<0.005	<0.05			S
Ric oquino Spacceam	8/1/83	K0.005	0.05	0.001	0.005	<p.01< td=""><td>0.0005</td><td><0.005</td><td>0.006</td><td>0.008</td><td>0.005</td><td>(0.01</td><td>K0.005</td><td></td><td></td><td></td><td>T</td></p.01<>	0.0005	<0.005	0.006	0.008	0.005	(0.01	K0.005				T
Rio Paguate Above		(0.005	<0.05	0.001	0.005	<0.01	0.0005	₹0.005	0.005	0.010	0.005	₹0.01	ح0.005	0.05			Τ
Rio Moquino Above the Confluence	8/1/83	<0.005	0.05	0.001	0.005	0.01	0.0005	0.005	0.001	0.005	0.003	20.01	0.005	0.05			T
tio Paguare ord Crossing	8/1/83	0.005	0.05 4	0.001	0.005 4	0.01	< 0.0005	0.007	0.008	0.008	0.003	۷0.01	0.005	40.05			
Paquate Reservoir	8/1/83	0.012	0.19 ر	0.001	0.005 4	.0.01	40.0005	0.005	0.005	0.053	0.01	40.01	0.007	€0.05			
Jackpile #4			DISCONTI	NUED, NO	SAMPLE												
CONFIDEN	JTIAI -			NUED, NO		101.5							POI -I	=PA0	1-0004	702	
COIN IDEI	,	1	וט	CONTINUE	, NU SAN	TIPLE		••					. 0	, .0	. 0001	. 02	

									0. 2									
DESCRIPTION	DATE	рН	TDS ppm	Cond umhos	HCO 3	C1 ppm	SO ₄	Na ppm	K ⁺	Ca ⁺⁺ ppm	Mg ⁺⁺ ppm	NO3	P. ppm	S10 ₂	Mn ppm			T
io Paguate Opstream	9/1/83	7.91	896	1080	334	11.3	313	43.7	7.3	129	53	3.6	0.46.	30.6	0.13			
'lio 'loquino 'nstream	9/1/83	8.36	1453	1650	281	14.0	751	153	9.3	130	93	3.2	0.64	22.3	0.022			
the Confluence	9/1/83	7.53	1988	2100	451	20.3	1001	150	10.6	194	156	3.2	0.74	20.0	0.65			
Rio Moquino Above the Confluence	9/1/83	8.39	1864	2020	281 .	16.9	1063	197	9.9	166	126	3.3	0.81	18.3	0.06			
Niohanguate Ford Grossing	9/1/83	8.32	2017	2080	305	19	1152	207	9.9	182	138	3.1	0.81	17.7	0.24	·		
Paguate Reservoir	9/1/83	8.01	1786	1'800	.366	53.5	.858	316	19.3	74	94	3.7	1.10	4.2	0.53			
!ackpile #4	-		DISCON	TINUED, N	O SAMPLE													
lacknile New Shop			DISCON	INUED, N	D SAMPLE									•				
Jackpile Old Shop			DISCON	INUED, N	O SAMPLE											ļ. :		7
	DATE	As	Ba ppm	Cd	Cr	Pb	Hg	Se	Cu	Fe ppm:	Zn ppm	Mo ppm	N1 ppm	D D III.				
Rio Paguate Upstream	9/1/83	<0.005	0.07	0.001	0.005	0.01	0.0005	(0.005	0003	0.015	0.006	(0.01	<0.005	<0.05				T
Rio Loquino "pstream	9/1/83	<0.005	0.08	0.001	(0.005' 4	0.01	0.0005	0.005	0.006	0.01	0.001	0.01	0.012	د0.05			1.	1
Rio Paguate Above	9/1/83	<0.005	0.07	0.001	(0.005 <	0.01	0.0005	<0.005	0.004	0.011	0.003	<0.01	<0.005	k0.05				
Hio Moquino Above the Confluence	9/1/83	(0.005	0.08	0.001	<0.005	0.01	<0.0005	<0.005	0.005	0.011	0.003	40.01	<0.005	<0.05				
Rio Paguate Ford Crossing	9/1/83	40.005	0.08	0.001	(0.005 d	0.01	0.0005	<0.005	0.004	0.026	0.002	<0.01	<0.005	€0.05				
Paquate Reservoir	9/1/83	(0.005	0.27	(0.001	<0.005 <	0.01	k0.0005	<0.005	0.004	0.006	0.006	0.01	0.006	0.05				\top
Jackpile #4			DISCON	INUED, N	O SAMPLE	1 +												
CONFIDEN			1	INUED, N		AMPLE							POL-	EPA0	1-0004	† 703		

LOCATION OF GROUND WATER MONITORING STATIONS





JACKPILE - AIR SAMPLING SURVEY

THIRD QUARTER, 1983

EOCATION	DATE	TOTAL PARTICULATE ugm/M ³	U-Nat. uCi/mlx10-15	Ra-226 uCi/mlx10-15	Th-230 uCi/mlx10-15	Pb-210 uCi/mlx10-15
1. Dump F		ELECTRICAL	POWER DISCONT	INUED, NO SAMPLI	E	
2.P-10 Area	7/83 8/83 9/83	28.13 14.89 20.49	0.947 0.71 0.77	0.356 2.18 0.17	1.06 0.69 1.31	17.35 18.79 18.21
3. West Gate	7/83 8/83	29.13 17.95	0.788 0.48	. 0.191	1.41 0.92 1.25	16.31 20.59 19.41
4. Well #4	9/83 7/83 8/83 9/83	24.12 27.42 17.17 23.48	0.67 1.01 2.04 0.91	0.21 0.184 0.33 1.09	1.09 1.57 1.09	19.44 20.43 18.72

CONFIDENTIAL POL-EPA01-0004706

JACKPILE-AMBIENT RADON SURVEY

THIRD QUARTER, 1983

			Rn-222
LOC	CATION	DATE	pCi/L
1.	Dump F	7/83	2.92
-•	Damp 2	•	
		8/83	Discontinued
		9/83	Discontinued
2.	P-10 Area	7/83	1.34
	ı	8/83	1.76
		9/83	2.05
3.	Well #4	7/83	1.05
		8/83	1.18
		9/83	1.54
4.	Westgate	7/83	2.45
		8/83	2.37
		9/83	2.43

LOCATION OF AIR QUALITY MONITORING STATIONS

